

Homework for Today Friday, March 17<sup>th</sup>

Absent

6A Brennan Craig

6B None

6C None

Science -

Rocks & Soil video; Fire Rocks, Stones of Sand and Changing Rocks packet

Social Studies -

"The Far East: China" packet

Reading -

- Library

- Reward

- "The Crossover" AR Test (Please take on Monday)

English/Language Arts -

- Gallery Walk Activity

- HW: Read!

- Collected Response HW & Logs

Math -

None

Other -

Last Day to AR Test is Wednesday, March 22

77

# Zero to One .. Page 1

0

1

$\frac{1}{2}$

$\frac{1}{4}$

$\frac{2}{4}$

$\frac{3}{4}$

$\frac{1}{8}$

$\frac{2}{8}$

$\frac{3}{8}$

$\frac{4}{8}$



# Zero to One - Page 2

$$\frac{5}{8}$$

$$\frac{6}{8}$$

$$\frac{7}{8}$$

$$\frac{1}{3}$$

$$\frac{2}{3}$$

$$\frac{1}{6}$$

$$\frac{2}{6}$$

$$\frac{3}{6}$$

$$\frac{4}{6}$$

$$\frac{5}{6}$$



## Fraction Number Lines

Cut on the dotted lines to separate the fractions. Glue them on the correct number line.

Halves, Thirds, Fourths & Fifths

$\frac{1}{2}$	$\frac{2}{3}$	$\frac{1}{4}$	$\frac{2}{4}$	$\frac{3}{4}$	$\frac{1}{5}$	$\frac{2}{5}$	$\frac{3}{5}$	$\frac{1}{3}$	$\frac{4}{5}$
Sixths, Sevenths & Eighths									
$\frac{4}{8}$	$\frac{3}{8}$	$\frac{5}{8}$	$\frac{6}{8}$	$\frac{7}{8}$	$\frac{2}{8}$	$\frac{1}{8}$	$\frac{3}{6}$	$\frac{3}{7}$	$\frac{4}{6}$
$\frac{5}{7}$	$\frac{1}{7}$	$\frac{1}{6}$	$\frac{2}{6}$	$\frac{5}{6}$	$\frac{2}{7}$	$\frac{6}{7}$	$\frac{4}{7}$		

## Fraction Number Lines

Cut on the dotted lines to separate the fractions. Glue them on the correct number line.

Halves, Thirds, Fourths & Fifths

$\frac{1}{2}$	$\frac{2}{3}$	$\frac{1}{4}$	$\frac{2}{4}$	$\frac{3}{4}$	$\frac{1}{5}$	$\frac{2}{5}$	$\frac{3}{5}$	$\frac{1}{3}$	$\frac{4}{5}$
Sixths, Sevenths & Eighths									
$\frac{4}{8}$	$\frac{3}{8}$	$\frac{5}{8}$	$\frac{6}{8}$	$\frac{7}{8}$	$\frac{2}{8}$	$\frac{1}{8}$	$\frac{3}{6}$	$\frac{3}{7}$	$\frac{4}{6}$
$\frac{5}{7}$	$\frac{1}{7}$	$\frac{1}{6}$	$\frac{2}{6}$	$\frac{5}{6}$	$\frac{2}{7}$	$\frac{6}{7}$	$\frac{4}{7}$		



# Equivalent Fractions Number Lines

Cut on the dotted lines to separate the fractions. Glue them on the correct number line.

## Halves, Thirds & Sixths

0	$\frac{3}{6}$	$\frac{2}{2}$	$\frac{1}{6}$	$\frac{2}{6}$	$\frac{1}{2}$	$\frac{5}{6}$
0	0	$\frac{4}{6}$	$\frac{6}{6}$	$\frac{3}{3}$	$\frac{1}{3}$	$\frac{2}{3}$

## Halves, Fourths & Eighths

0	0	$\frac{2}{8}$	$\frac{1}{8}$	$\frac{8}{8}$	$\frac{4}{4}$	$\frac{3}{4}$	$\frac{1}{2}$	$\frac{2}{2}$
0	$\frac{1}{4}$	$\frac{2}{4}$	$\frac{4}{8}$	$\frac{3}{8}$	$\frac{5}{8}$	$\frac{6}{8}$	$\frac{7}{8}$	



## Mixed Numbers Number Line

Cut on the dotted lines to separate the fractions. Glue them on the correct number line.

Halves, Thirds, Fourths & Fifths

$\frac{1}{2}$	$\frac{2}{3}$	$\frac{1}{4}$	$\frac{2}{4}$	$\frac{3}{4}$	$\frac{1}{5}$	$\frac{2}{5}$	$\frac{3}{5}$	$\frac{1}{3}$	$\frac{4}{5}$
Sixths, Sevenths & Eighths									
$\frac{4}{8}$	$\frac{3}{8}$	$\frac{5}{8}$	$\frac{6}{8}$	$\frac{7}{8}$	$\frac{2}{8}$	$\frac{1}{8}$	$\frac{3}{6}$	$\frac{3}{7}$	$\frac{4}{6}$
$\frac{5}{7}$	$\frac{1}{7}$	$\frac{1}{6}$	$\frac{2}{6}$	$\frac{5}{6}$	$\frac{2}{7}$	$\frac{6}{7}$	$\frac{4}{7}$		

## Mixed Numbers Number Line

Cut on the dotted lines to separate the fractions. Glue them on the correct number line.

Halves, Thirds, Fourths & Fifths

$\frac{1}{2}$	$\frac{2}{3}$	$\frac{1}{4}$	$\frac{2}{4}$	$\frac{3}{4}$	$\frac{1}{5}$	$\frac{2}{5}$	$\frac{3}{5}$	$\frac{1}{3}$	$\frac{4}{5}$
Sixths, Sevenths & Eighths									
$\frac{4}{8}$	$\frac{3}{8}$	$\frac{5}{8}$	$\frac{6}{8}$	$\frac{7}{8}$	$\frac{2}{8}$	$\frac{1}{8}$	$\frac{3}{6}$	$\frac{3}{7}$	$\frac{4}{6}$
$\frac{5}{7}$	$\frac{1}{7}$	$\frac{1}{6}$	$\frac{2}{6}$	$\frac{5}{6}$	$\frac{2}{7}$	$\frac{6}{7}$	$\frac{4}{7}$		



## Number Line with Improper Fractions

Cut on the dotted lines to separate the fractions. Glue them on the correct number line.

Halves & Fourths

$\frac{1}{2}$	$\frac{1}{4}$	$\frac{5}{2}$	$\frac{5}{4}$	$\frac{9}{4}$	$\frac{4}{4}$	$\frac{3}{2}$	$\frac{11}{4}$	$\frac{15}{4}$	$\frac{13}{4}$
$\frac{2}{4}$	$\frac{10}{4}$	$\frac{6}{4}$	$\frac{2}{2}$	$\frac{7}{4}$	$\frac{14}{4}$	$\frac{7}{2}$	$\frac{3}{4}$	$\frac{6}{2}$	$\frac{12}{4}$

## Number Line with Improper Fractions

Cut on the dotted lines to separate the fractions. Glue them on the correct number line.

Halves & Fourths

$\frac{1}{2}$	$\frac{1}{4}$	$\frac{5}{2}$	$\frac{5}{4}$	$\frac{9}{4}$	$\frac{4}{4}$	$\frac{3}{2}$	$\frac{11}{4}$	$\frac{15}{4}$	$\frac{13}{4}$
$\frac{2}{4}$	$\frac{10}{4}$	$\frac{6}{4}$	$\frac{2}{2}$	$\frac{7}{4}$	$\frac{14}{4}$	$\frac{7}{2}$	$\frac{3}{4}$	$\frac{6}{2}$	$\frac{12}{4}$

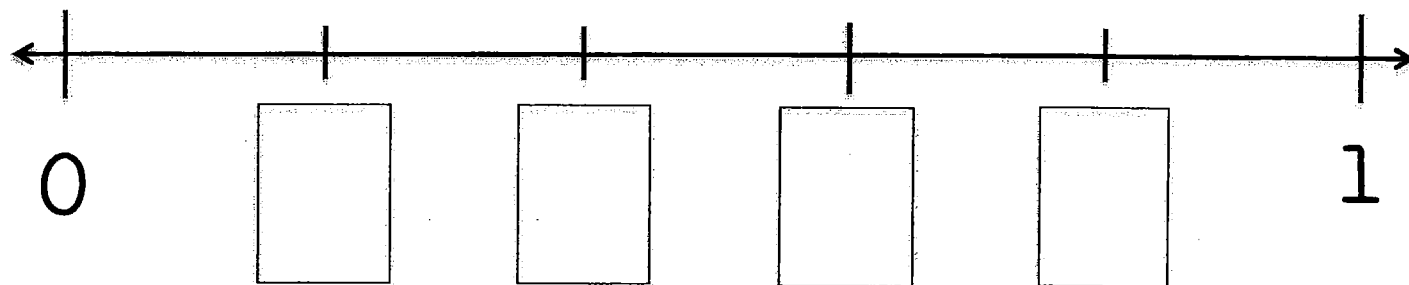
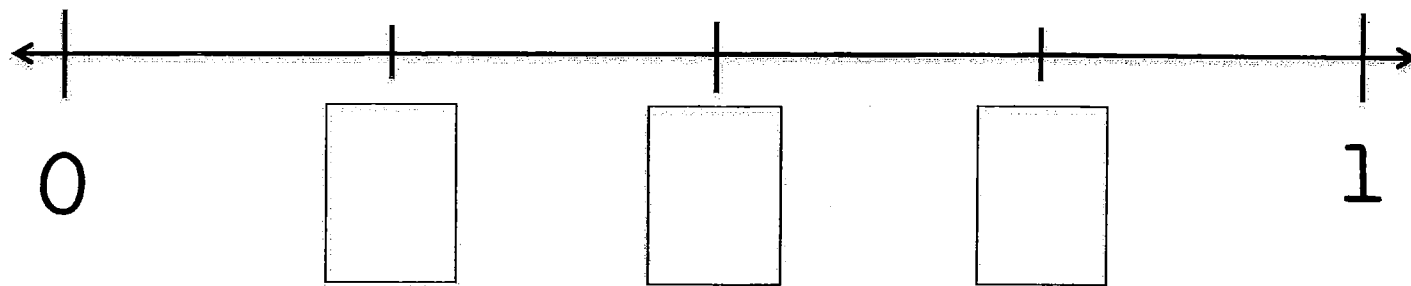
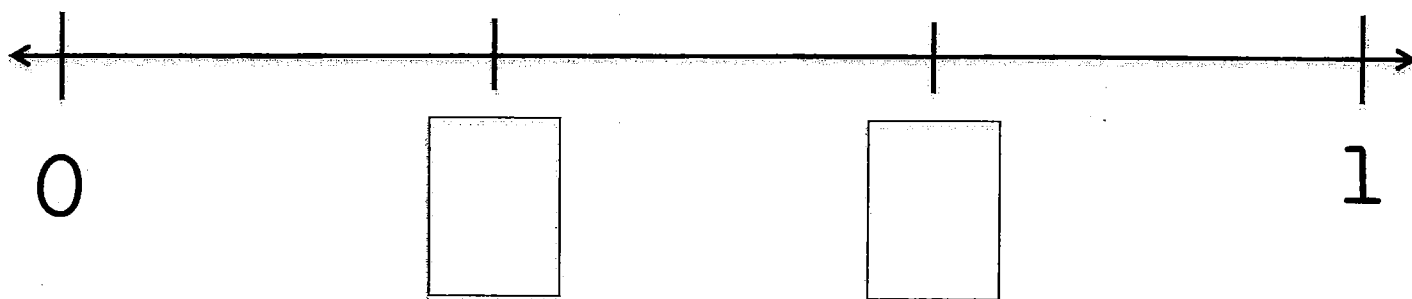
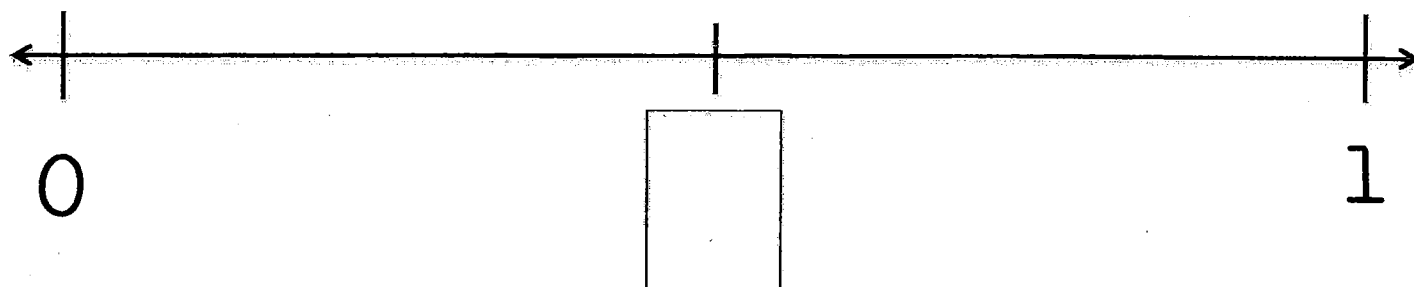


Name: \_\_\_\_\_

Date: \_\_\_\_\_

# Fraction Number Lines

Halves, Thirds, Fourths & Fifths

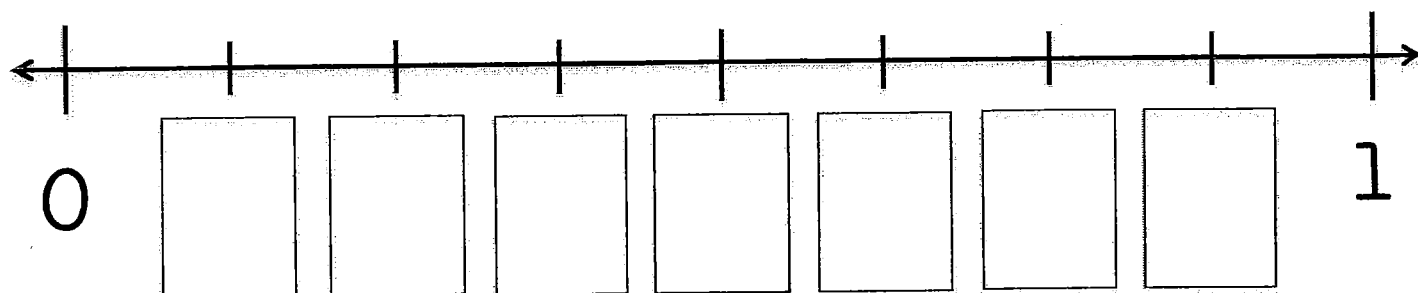
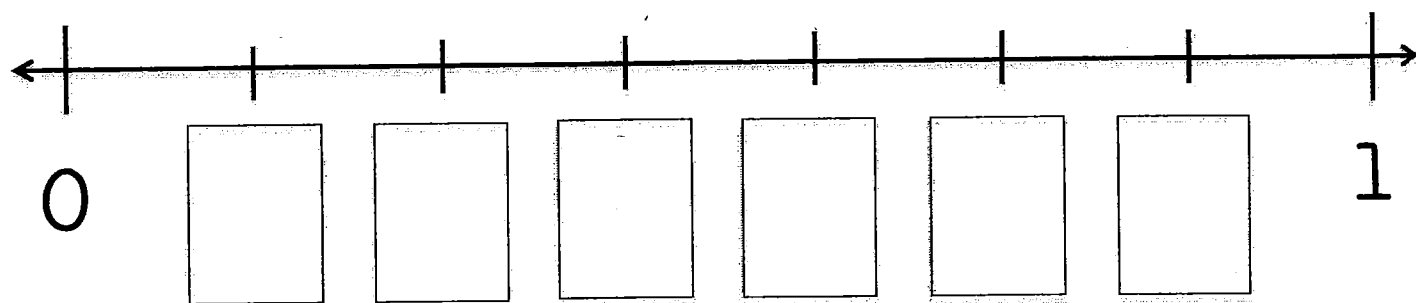
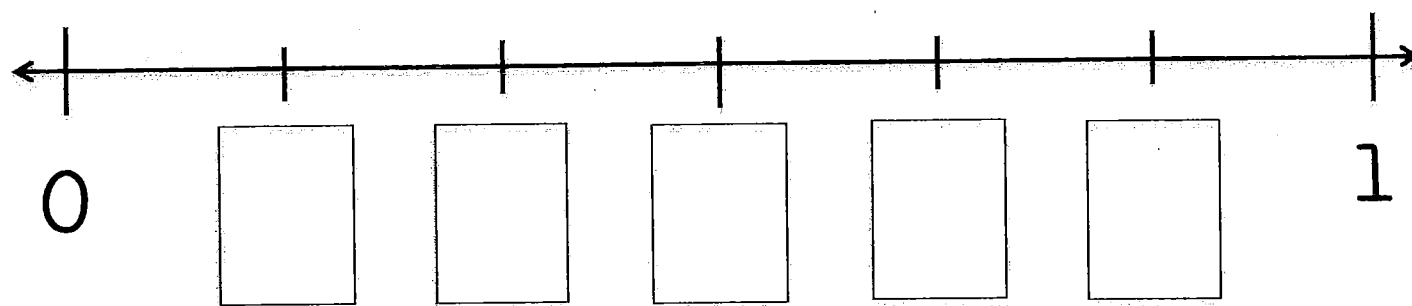


Name:

Date:

# Fraction Number Lines

Sixths, Sevenths & Eighths



Explain how to figure out where a fraction goes on a number line.

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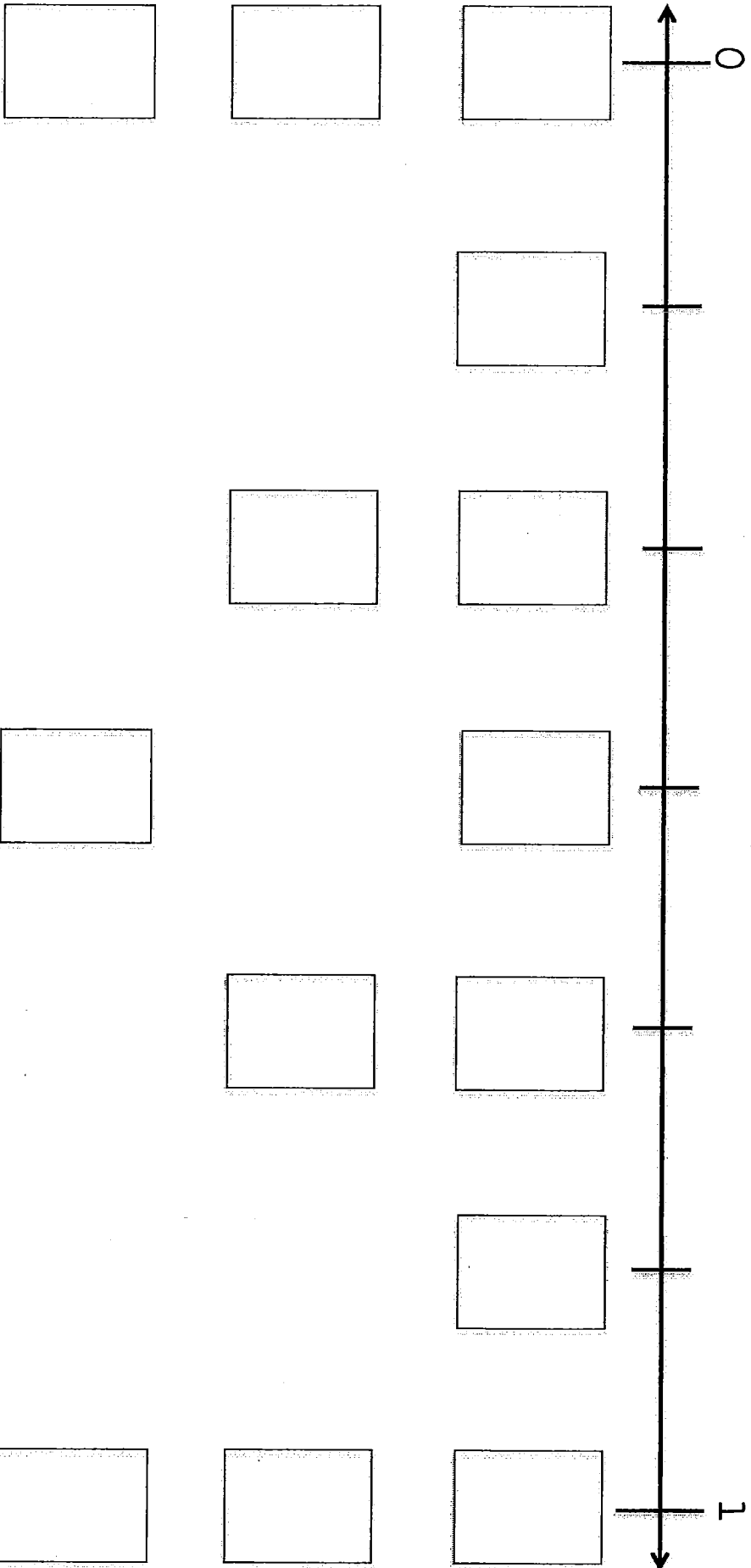
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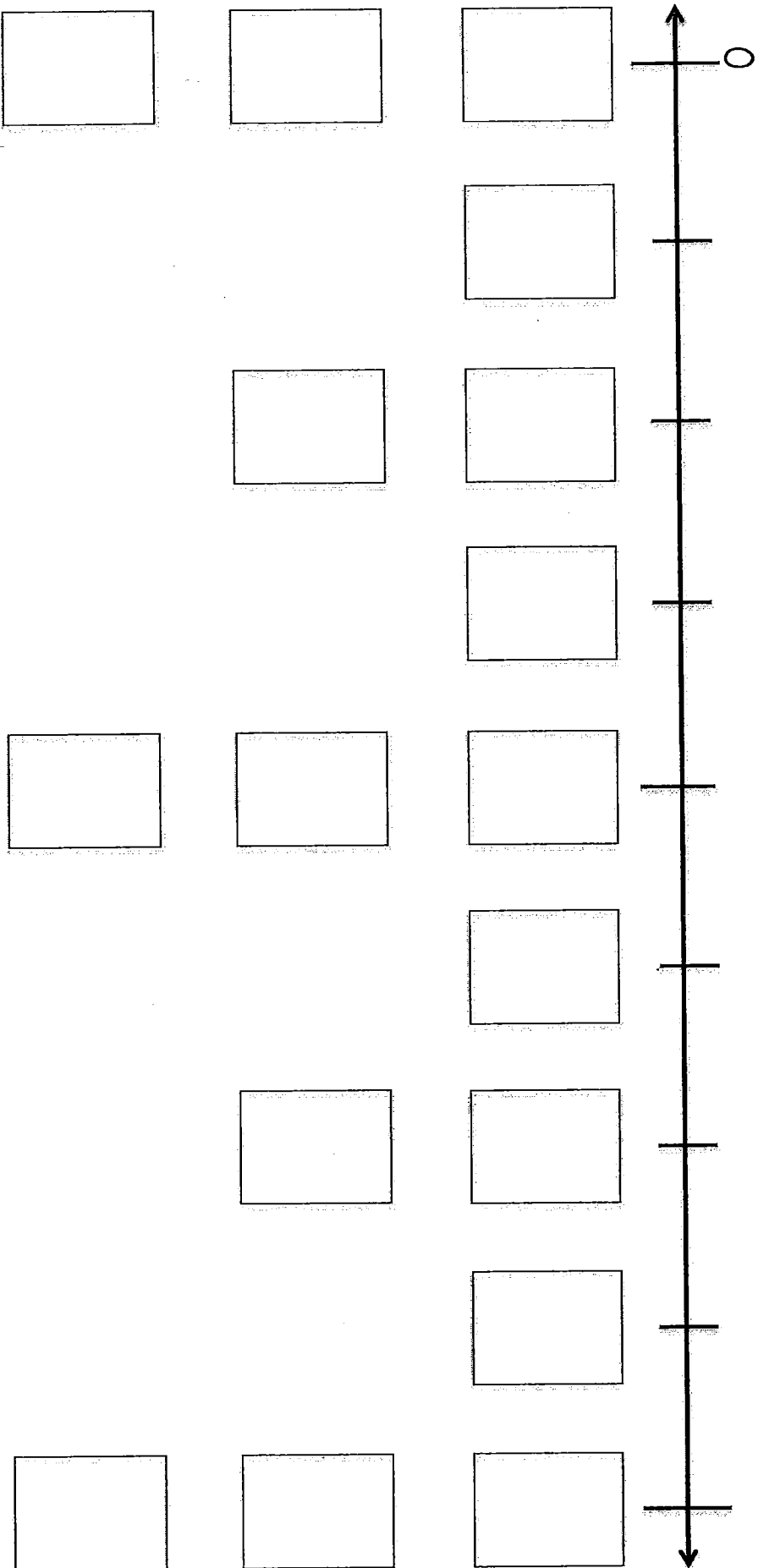
# Equivalent Fractions Number Line Halves, Thirds & Sixths



Name:

Date:

# Equivalent Fractions Number Lines Halves, Fourths & Eighths

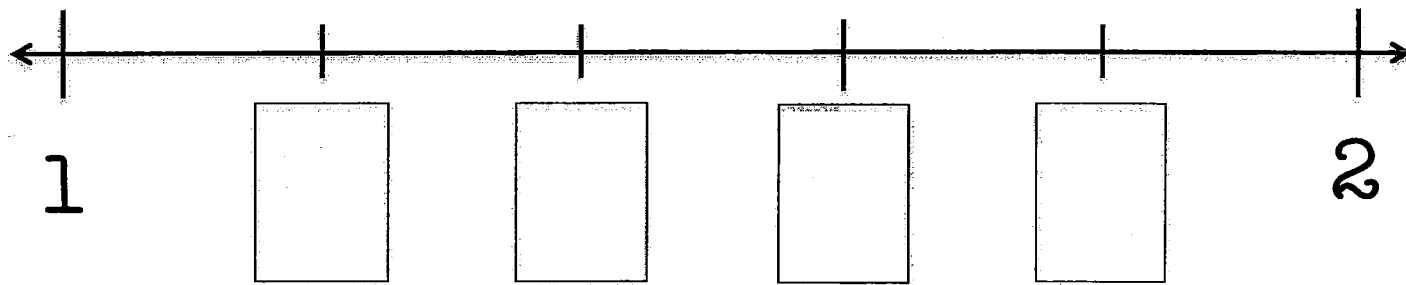
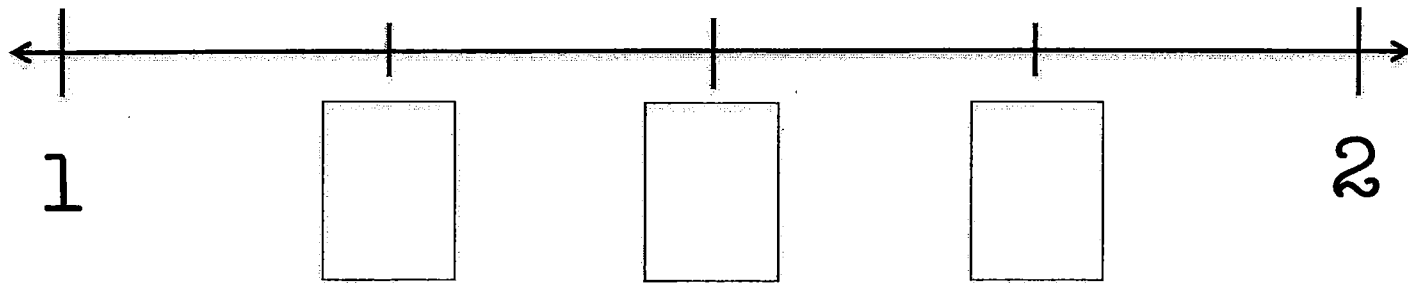
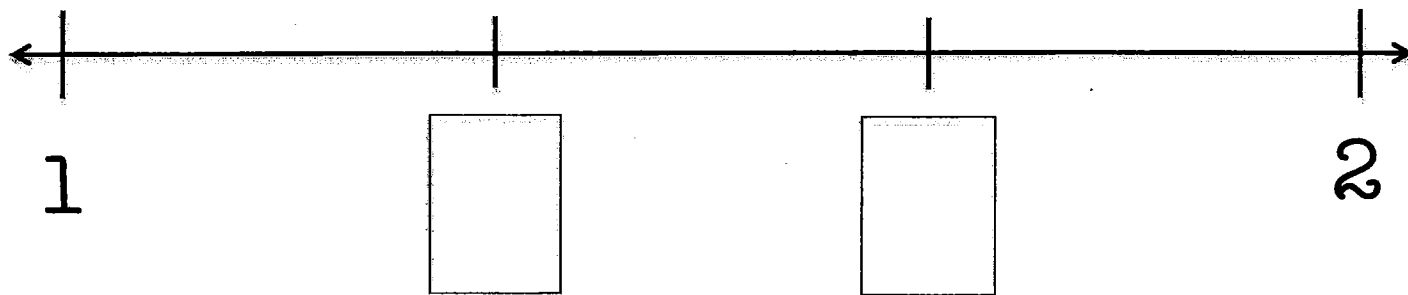
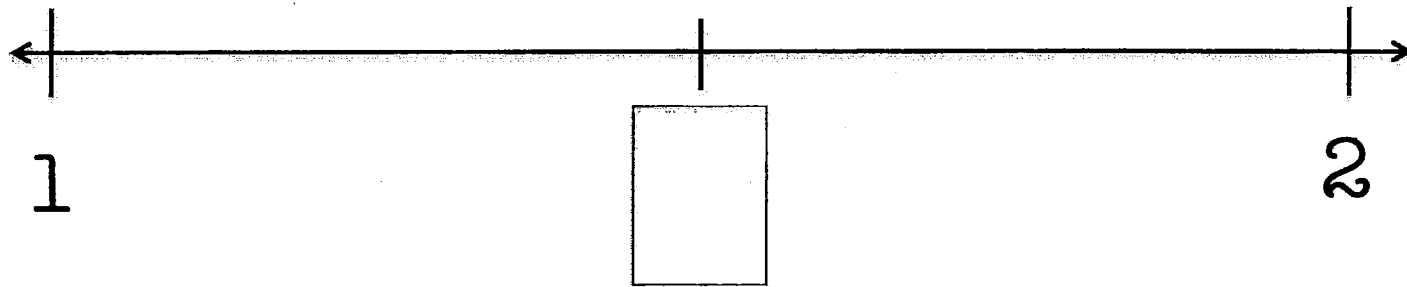


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# Mixed Numbers Number Line

Halves, Thirds, Fourths & Fifths

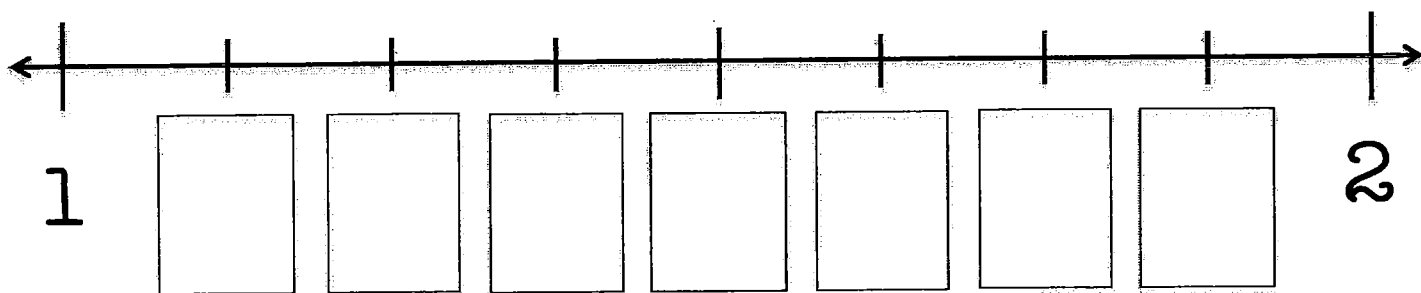
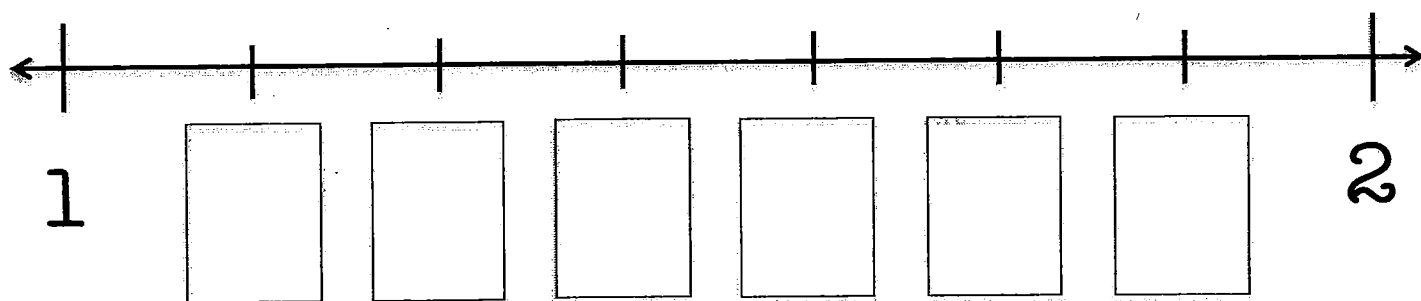
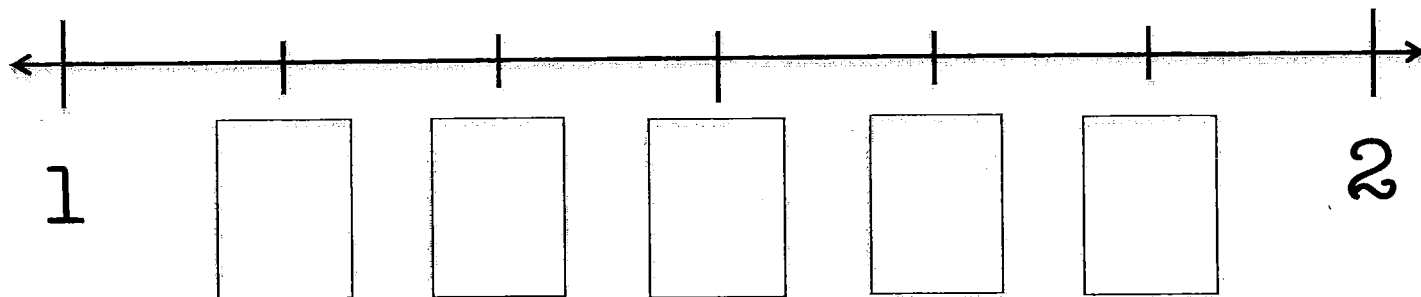


Name:

Date:

# Mixed Numbers Number Line

Sixths, Sevenths & Eighths



Explain how to figure out where a mixed number goes on a number line.

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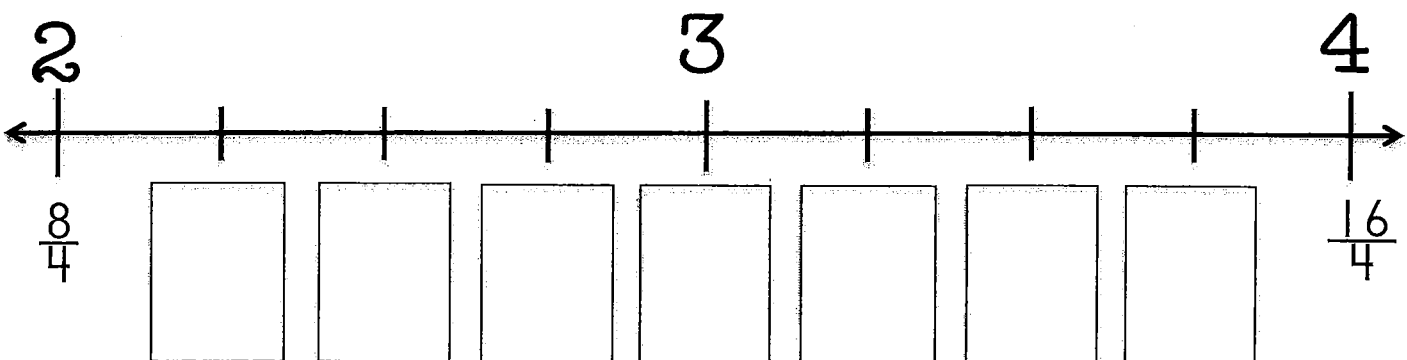
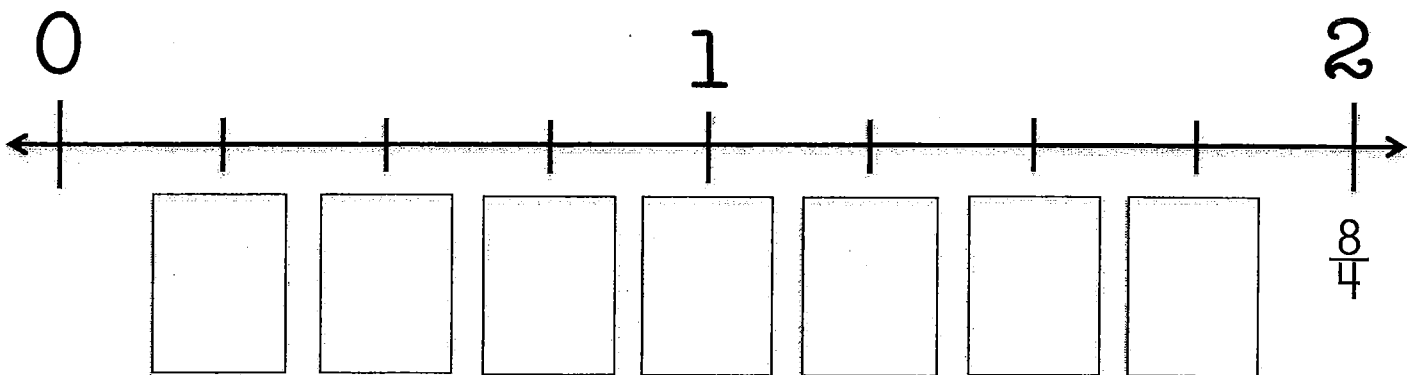
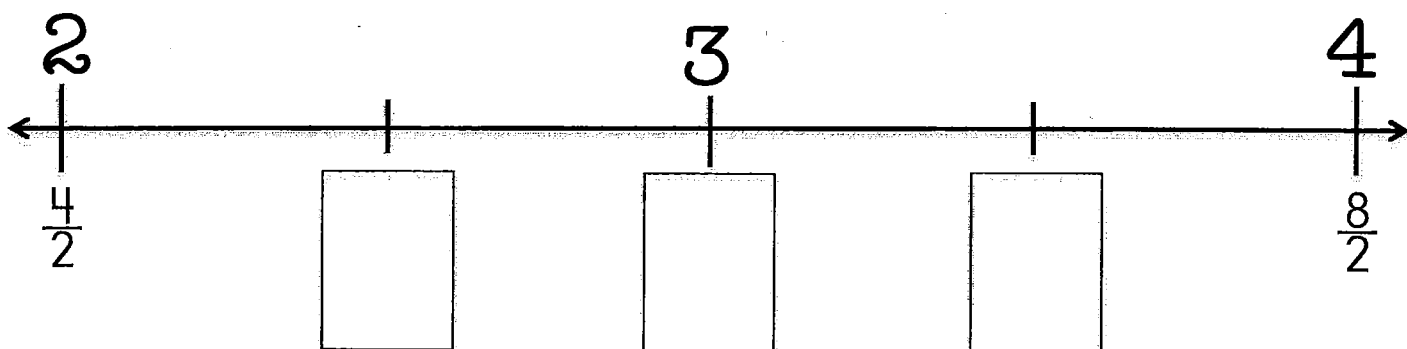
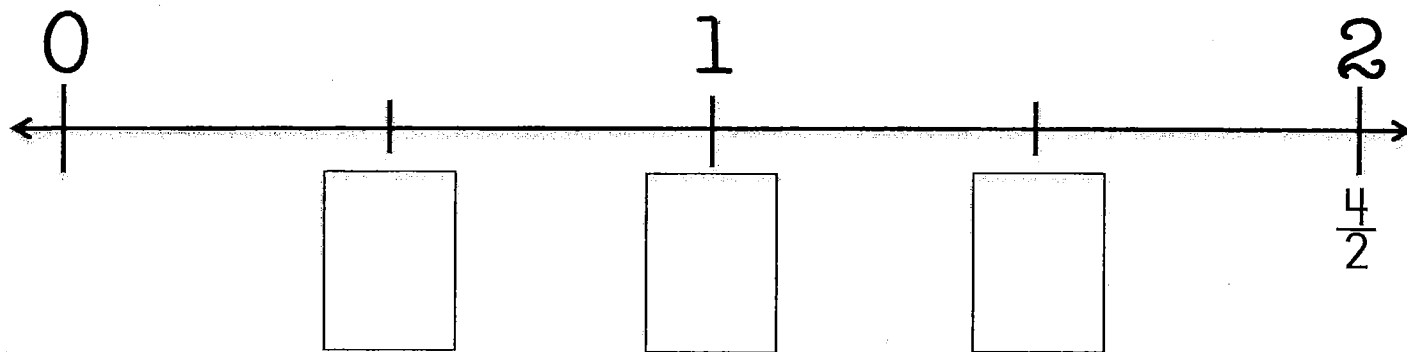
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Name: \_\_\_\_\_

Date: \_\_\_\_\_

Number Line with Improper Fractions  
Halves & Fourths





## The Far East: China

Along with Mesopotamia, ancient Egypt, and the Indus Valley, ancient China was one of the world's earliest civilizations. Not very much is known about the beginnings of the Chinese Civilization. We do know, however, that like the other early civilizations, the Chinese Civilization developed on the banks of major rivers. As you have learned before, the fertile land beside rivers provided rich soil for farming and hunting, and water for drinking, irrigating crops, and fishing. The civilization of ancient China developed along the Huang He (Hwang Ho), or Yellow River. The Huang He is the second longest river in China. It flows east from the Tibetan highlands to the Yellow Sea in north China, with a length of about 3,000 miles. Villages also were developed along the Chang Jiang (Yangtze), the longest river in China.

The Huang He or Hwang Ho is sometimes called the Yellow River because of the color of the yellow mud it carries. Like the Nile, each year the Huang He overflows its banks, and when the flood water recedes, fertile mud is left behind. Crops grow well in this fertile soil, so it is not surprising that by around 5000 B.C., agricultural villages began to spring up along this river.

The Chinese Civilization began about 8000 years ago and still exists today. It is a rich culture that has contributed many things to the world. Since China's history is so long, space does not permit us to consider anything but the beginning of this intriguing civilization. The Xia (Hsia) Dynasty is considered to be the first dynasty of kings to rule China. The Hsia Dynasty lasted from around 2205 B.C. to 1766 B.C. During this period, the Chinese Civilization developed in a manner similar to the civilizations in the Near East. The Chinese built irrigation canals to water their crops, they made bronze, harvested silk, used the potter's wheel, and the soldiers used chariots.

The Xia dynasty was eventually replaced with the Shang Dynasty. The Shang Dynasty lasted from about 1766 B.C. to 1122 B.C. During this period, cities were carefully planned, and the people were divided into social ranks that ranged from royalty and nobles to slaves. While most people during this dynasty were farmers, craftsmen became more popular. Bronze-casting was developed at about this time.

During the ten major dynasties that followed the Shang Dynasty, trade flourished. Trade routes between Asia and the West were established, and silk became the main export of China. Silk is a very thin cloth made from cocoons spun by silkworms. Since silk was one of the most valuable items exported along the trade routes to West Asia and Europe, these routes became known as the Silk Roads. Other countries wanted to make silk for themselves, but the Chinese kept their methods of producing this cloth a secret until the fourth century A.D.

In ancient China, there were many gods, such as the earth god, the rain god, and the river god, but there was one god that was revered above all others. This was Shang Ti, "the Ruler Above."

The Chinese made sacrifices to the gods to ensure good crops, success in battle, and good fortune. While the poor could only present food and wine to the gods in their temples, the rich sacrificed animals. On special occasions, such as the death of a king, humans were sacrificed. The humans who were sacrificed were often prisoners of war or slaves.

### CHINESE CIVILIZATION AT A GLANCE

**WHERE:** Valleys of the Huang He  
and Chang Jiang Rivers in Asia

**WHEN:** Beginning about 5000 B.C.

#### ACHIEVEMENTS:

- Discovered and cultivated silk
- Built the Great Wall of China
- Invented gunpowder, rockets, magnetic compass, book printing, paper money, porcelain, and many more
- Two great teachers lived in China—Confucius and Lao-tzu

The ancient Chinese believed that when a person died, he or she went to live with Shang Ti and that one's dead ancestors could influence life on Earth for his or her family. They believed their ancestors had powers to help them make wise decisions or to punish them. Therefore, the Chinese worshipped their ancestors. To please their ancestors, the Chinese built temples. They held many celebrations to honor their ancestors.

Perhaps as great as the technological contributions the Chinese made to the world were the philosophical contributions made by two great teachers who lived in China. One was Confucius, who lived from 551 B.C. to 479 B.C. Among other things, Confucius taught politeness, sincerity, unselfishness, respect for laws, and hard work. His beliefs have been written down, and his philosophy has become a religion called **Confucianism**.

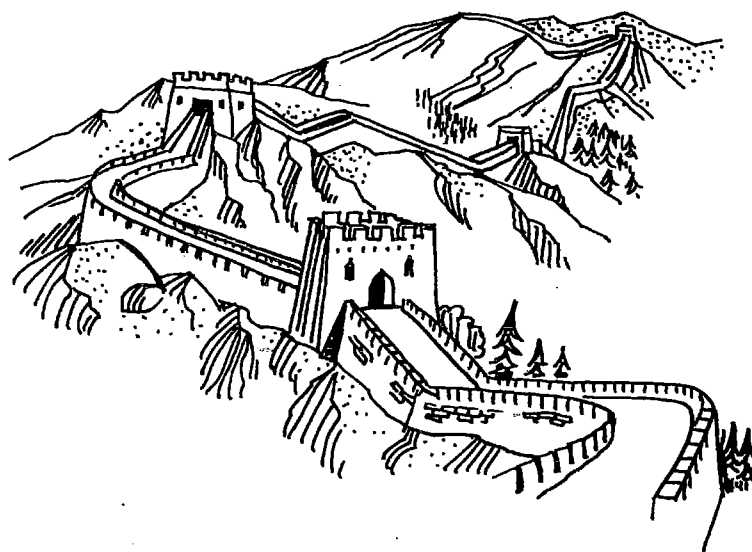
Another philosopher who lived about the same time as Confucius was Lao-tzu. His beliefs were quite different from Confucius. Confucius thought people should improve society, but Lao-tzu taught that people should withdraw from society. He believed that people should live very simple lives in harmony with nature. He thought people should not try to be famous or rich but to be happy with what they had. He also thought people should sit quietly and meditate. His philosophy is called **Taoism** and comes from the word "tao," which means "way."

One of the great achievements of the ancient Chinese Civilization was the construction of the Great Wall of China, built to keep out invaders. Actually, the wall is not a single wall, but two stone walls that average about ten feet apart and run parallel to each other. The area between the walls is filled with earth and lined with stone, forming a road. The wall, which ran along the border between China and the territories in the north, is about 30 feet high and 1,500 miles long.

Construction of the Great Wall was not a single job. Many separate walls were built over 2,000 years. The wall began as an earthen wall supported by planks. It was built in segments by different states and each was only a few miles long. In about 221 B.C., Shi Huang Ti, the first Emperor of China, had these walls linked into one long wall. After the Qin Dynasty, other dynasties expanded and enlarged the wall until it was finished about 204 B.C. Even after the wall was completed, the Chinese continued working on it, making it more elaborate and modern in design. The stone wall, as we know it today, began during the Ming Dynasty, which lasted from A.D. 1368 to 1644. The remaining sections of the wall we see in photographs were built during this time. The wall built

during the Ming Dynasty was strong, over 4,500 miles long, and was patrolled by 100,000 soldiers. Unfortunately, the entire length of the wall does not exist today. Parts of the wall have been taken down and used to build other structures.

The Chinese invented many things. Some of their inventions are the magnetic compass, crossbow, matches, moveable type, paper money, acupuncture, propeller, gunpowder, porcelain, umbrella, paper, wheelbarrow, seismograph, kite, cast iron, abacus, horse collar, rocket, brandy, whiskey, the game of chess, lacquer, and many others.



The Great Wall of China

Name: \_\_\_\_\_ Date: \_\_\_\_\_

## Chinese Inventions and Discoveries

### Crossword Puzzle Clues

Complete the crossword puzzle on page 24 using the clues below about Chinese inventions and discoveries.

#### ACROSS

3. Without this invention, humans would never have gotten to the moon.
5. Ben Franklin got a charge out of using this invention.
6. The moldboard \_\_\_\_\_ made of cast iron had a central ridge ending in a sharp point that cut the soil, and wings that pushed the soil off. It was said to have begun the agricultural revolution when it came to Holland.
9. A mechanical bow and arrow
11. Hard and brittle, \_\_\_\_\_ iron is formed into a particular shape by pouring the liquid metal into a mold.
12. The discovery of the \_\_\_\_\_ of the blood is generally credited to William Harvey in 1628. However, it was discussed in a medical manual in the second century B.C. in China.
15. Used to propel bullets from guns
17. The medical practice of sticking pins in the body to relieve pain or cure illnesses
18. A liquid used in printing
20. It's hard to believe that little worms can produce this beautiful thread.
21. Without \_\_\_\_\_ type, printing books would have been difficult.
23. A hard, white, translucent ceramic material used to make china
24. Without this twisted blade, some planes could not fly and ships could not move.

#### DOWN

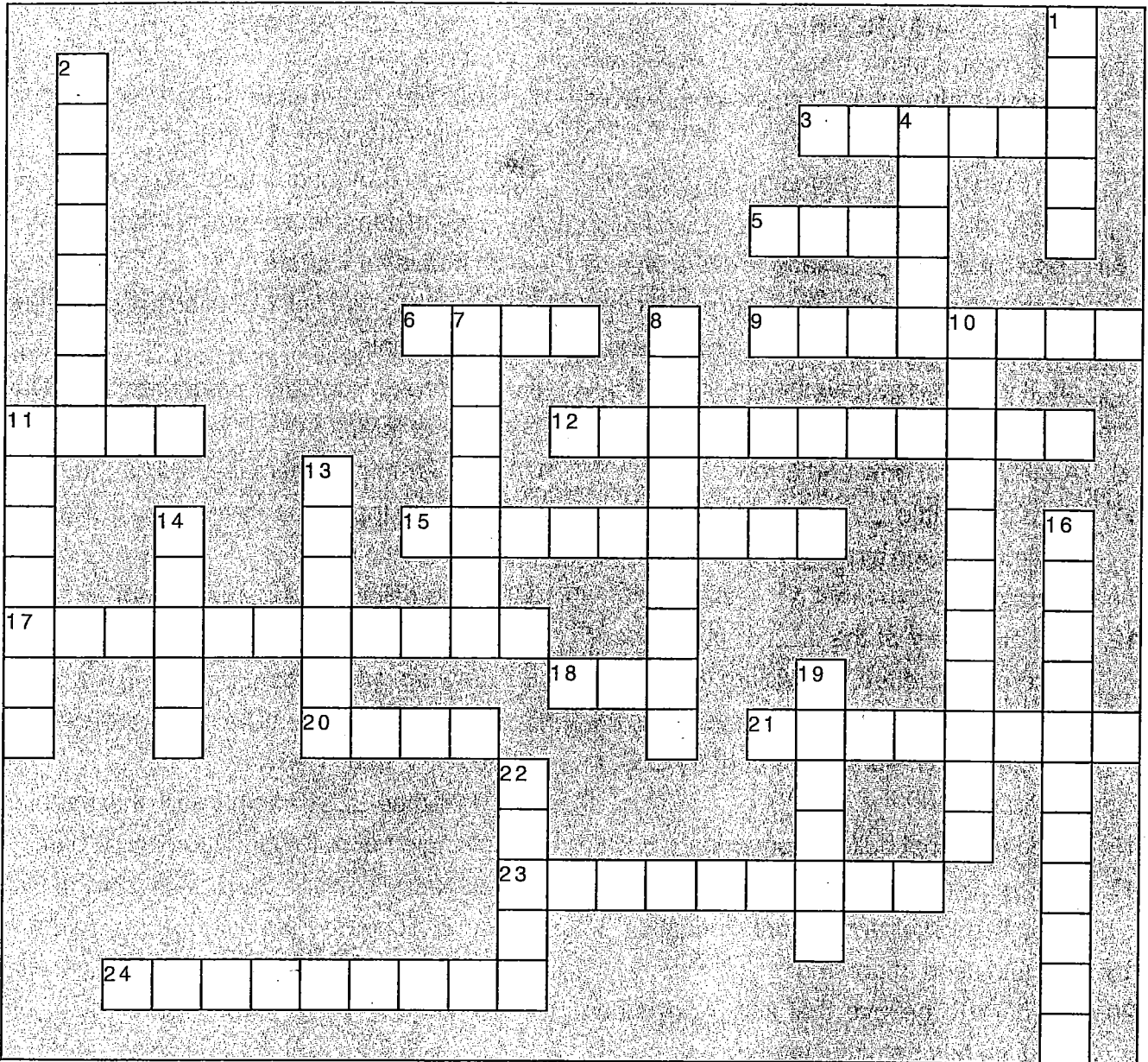
1. Using a \_\_\_\_\_ to start a fire is better than rubbing two sticks together.
2. Used to protect one from the rain or sun
4. A board game for two players that is similar to medieval warfare
7. A glossy, clear finish applied to many kinds of materials
8. We couldn't celebrate Independence Day without them.
10. An instrument that measures earthquakes
11. A device that helps travelers go in the right direction
13. Some call it a manual calculator.
14. Made of cellulose pulp, it is used for writing, drawing, and printing.
16. A one-wheeled vehicle with handles used to carry small loads
19. The horse \_\_\_\_\_ was a harness that enabled a single horse to haul a ton and a half.
22. Other civilizations used coins, but the Chinese pioneered the use of \_\_\_\_\_ money.



Name: \_\_\_\_\_ Date: \_\_\_\_\_

## Chinese Inventions and Discoveries Crossword Puzzle

Use the clues on page 23 to complete the puzzle below.

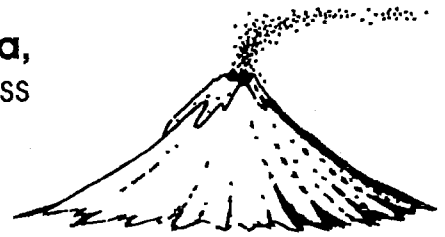




# Fire Rocks

Name \_\_\_\_\_

Deep inside the earth the intense heat causes some rocks to melt. This molten rock, called **magma**, rises toward the surface of the earth because it is less dense than solid rock. Magma that flows onto the earth's surface is called **lava**. Some magma cools before it reaches the earth's surface, forming **igneous** rocks.



Many different types of igneous rocks can be formed, depending on how fast the magma or lava cools. When melted rock cools quickly, very small crystals are formed, causing the new rock to appear glassy. When molten rock cools slowly, large crystals are formed.

- Listed in the word bank are some common igneous rocks. Solve the puzzle, matching each rock with its description. Use what you have read above and information from other sources.

## Word Bank

pumice	gabbro
granite	magma
lava	obsidian
basalt	

1. Melted rock that comes out of the earth.
2. Melted rock that cooled quickly, forming a black, glassy rock.
3. Greenish-black rock, formed from lava that flowed slowly over the surface.
4. Formed from lava that cooled with hot gases trapped inside, causing it to be filled with air holes.
5. Melted rock below the earth's surface.
6. Magma that cooled slowly, forming large crystals.
7. Lava that cooled slowly, forming large crystals.

1.	_____
2.	_____
3.	_____
4.	_____
5.	_____
6.	_____
7.	_____

- The hidden word: What do you call a mountain formed by cooled lava? \_\_\_\_\_

## Something Special

It's fun to grow crystals. Rock candy is actually giant sugar crystals. Ask your librarian to help you find a recipe for growing your own super rock candy crystals.

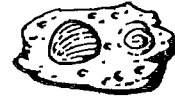
# Stones of Sand

Name \_\_\_\_\_

As rivers flow to the sea, they may carry mud, sand, pebbles, and boulders along the way. The river drops this material, called **sediment**, into the sea. As layers of sediment build up over a period of many years, the great pressure of all these layers changes the sediment into **sedimentary rock**.

Many different types of sedimentary rock can be formed, depending on the material that is found in the sediment. If the layer of sediment contains large amounts of sand, what kind of rock do you think will be formed? Of course, it will be sandstone.

limestone



sandstone

conglomerate



Use what you have read above and your science book to help you match the sedimentary rocks with their description.

\_\_\_ 1. Layers and layers of sand are deposited on the sea bottom to form this rock.

a. sandstone

\_\_\_ 2. A mixture of sand and small pebbles is "cemented" together to form this rock.

b. shale

c. limestone

d. conglomerate

\_\_\_ 3. Living plants in a swamp are covered with sediment and pressed, eventually forming this valuable source of energy.

e. coal

\_\_\_ 4. Small sea animals and shells are pressed into this kind of rock.

\_\_\_ 5. Layers of mud form the most common type of sedimentary rock.

Sediments settle at different rates of speed. Number these elements in the order that they would settle.

\_\_\_ pebbles    \_\_\_ boulders    \_\_\_ sand

What causes sediment to change into hard rock? \_\_\_\_\_

Where would you expect to find sedimentary rocks? \_\_\_\_\_

## Fun Fact

As the Mississippi River flows, it carries enough rock each day to fill 40,000 railroad cars.

# Changing Rocks

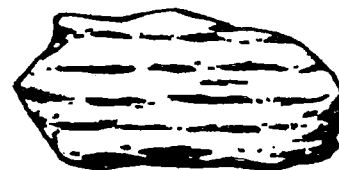
Name \_\_\_\_\_

With enough pressure and heat, sedimentary and igneous rock can be changed into a new rock. This new kind of rock is called **metamorphic**, which means "changed in form."

There are a number of ways that metamorphic rock can be formed. One way is when rocks that are buried deep under the earth's surface are flattened by the great pressure from above them. An example of this is when granite is changed into gneiss. Look carefully at the pictures. How has the appearance of the granite changed?

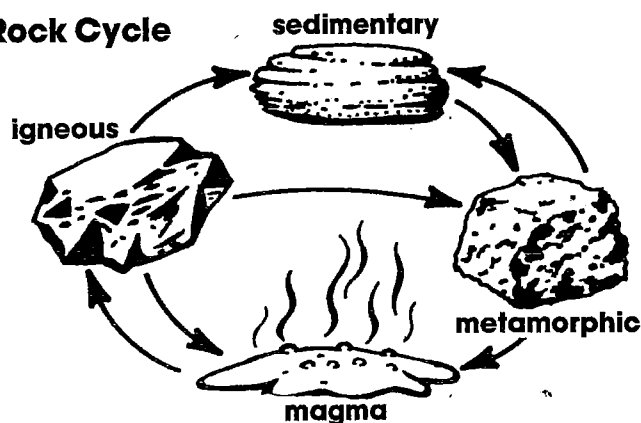


granite



gneiss

## Rock Cycle



The changing of rocks is an ongoing cycle. Look closely at the rock cycle diagram. This cycle shows how rock material is mixed and re-used again and again.

Unscramble the terms to show examples of how igneous and sedimentary rocks can change into metamorphic rock.

1. \_\_\_\_\_ changes \_\_\_\_\_  
H E S A L into T A L E S

2. \_\_\_\_\_ changes \_\_\_\_\_  
T R I N E G A into S I N E G S

3. \_\_\_\_\_ changes \_\_\_\_\_  
M O E S T E L N I into B E L M A R

4. \_\_\_\_\_ changes \_\_\_\_\_  
T E N O S D A N S into Q U I T A Z E T R

- What three types of rock can an igneous rock change into? \_\_\_\_\_
- What must happen to an igneous rock before it changes into a sedimentary rock? \_\_\_\_\_

## Find Out

Where is metamorphic rock used in your school? home? community?

